

DOCUMENT RESUME

ED 140 503

EA 009 690

AUTHOR Mann, Dale
TITLE A User-Driven Federally Supported System of School Improvement: Design Specifications.
PUB DATE 8 Apr 77
NOTE 33p.; Paper presented at the Annual Meeting of the American Educational Research Association (New York, N.Y., April 4-8, 1977)

EDRS PRICE MF-\$0.83 HC-\$2.06 Plus Postage.
DESCRIPTORS *Change Strategies; Educational Change; *Educational Improvement; *Federal Aid; *Federal Programs; *Motivation Techniques; Organizational Development; Program Administration; School Personnel; Self Actualization; Specifications

ABSTRACT

The reconciliation of federal purposes (to bring change to those who do and those who don't welcome it) with a user-driven system (a system that maximizes user self-determination) is the basic paradox analyzed in this speech. One of the principles of organizational development is that unless the individual's perceived self-interest can be engaged, there will be no change. Several strategies available for federal officials to engage the self-interests of school personnel are the forcing, buying, persuading, manipulating, and reinforcing of change. The political feasibility of these strategies varies by the legitimacy necessary to sanction their use, and with attitudes versus behavior as a target for change. A number of features are suggested that would characterize a user-driven system and those features are related to the paradox. Two rules used in selecting these features are the determination of (1) what will maximize the prospects for successful change at the service delivery level (schools and classrooms), and (2) what can reasonably be assumed to be within reach of federal policy-makers and program administrators. (Author/MLF)

* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *

ED140503

Dale Mann
Department of Educational Administration
Teachers College, Columbia University

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

A USER-DRIVEN FEDERALLY SUPPORTED SYSTEM OF
SCHOOL IMPROVEMENT: DESIGN SPECIFICATIONS

A Paper Prepared For the Annual Meetings of the American Educational
Research Association, New York, April 8, 1977

Part I: The Paradox of a User-Driven, Federally Supported System

Part II: Design Specifications For That System

EA 009 690

The Paradox of a User-Driven Federally-Supported System

Federal efforts to improve local schools have been hampered by a paradox. Change is whatever the service deliverers--schools and teachers--decide it is to be. The less self-determination is allowed to these ultimate implementors of change, the less total change will result. On the other hand, the Federal government has a responsibility to cause improvements in education. We expect the Federal government to make change happen even where local authorities--including teachers--may disagree. The decisions of local level actors about what changes should or should not be implemented are legitimate decisions. But so are the decisions of Federal level administrators. If delivery level autonomy must be maximized for there to be any change, yet that autonomy vitiates or contradicts Federal decisions, and if both sets of actors are making good faith, legitimate decisions, then how can there be a user-driven, Federally supported system of school improvement? How can a Federally sponsored system be designed that maximizes user self-determination?

A "user-driven" system of change is indicated from a wide variety of perspectives,¹ but would only be successful from the Federal perspective if the users chose to drive in directions endorsed by the national government. More importantly, some users would undoubtedly choose not to go anywhere at all. (Most districts, organizations, and individuals never "choose" in the

¹In the spirit of Alvin Gouldner, "...I have not felt compelled to inundate (these) pages with a sea of footnotes. If the substance and logic of what I say here does not convince, neither will the conventional rituals of scholarship," (The Coming Crisis of Western Sociology. New York, Harper Torchbook, 1973, pp. 75-76.)

sense of conscious selection among alternatives, but then neither do they change.) Those most in need of improvement are least likely to participate.² Although a user-driven system, i.e., a system that maximizes user autonomy is strongly indicated by recent research, it is also very likely to fail to do what it is supposed to do--make change happen. Any Federally sponsored effort to bring about change or improvement should deal with those users who do not wish to improve themselves. The reconciliation of Federal purposes (to bring change to those who do and who don't welcome it) with a user-driven system (a system that maximizes user self-determination) is the basic paradox for this paper.

Most Federal attempts to foster school improvement have used either a structural or a social psychological approach. Faced with 90,000 school buildings and two million teachers, Federal programs have concentrated on those parts of the system which are (a) hoped to be determinants of improvement across a range of institutions and which are (b) accessible to intervention. Working on the structural features of schooling (the arrangement of offices, the pattern of regulations and requirements, etc.) is an attempt to deal with diversity by focusing on the generic parts of the system. Citizen councils, administrative decentralization, open classrooms, team teaching, management-by-objectives, and PPBS are examples. The central idea has been that if you change organizational arrangements, then

²It should be noted the stress on volunteerism in the current generation of Federal programs also leaves untouched those most in need of change. Programs of improvement which employ devices such as "needs-identifications" and proposals have already narrowed their clientele to a group that is at least mildly interested in improvement. But the group of schools or LEAs that will not take those initiatives is in even greater need of assistance. I am unaware of a single, even descriptive study of that extremely important group of institutions.

those changes will condition or shape subsequent behavior. If it were possible to encourage child-centered teaching without introducing the paraphernalia of open classrooms or individually prescribed instruction, few reformers would object since such behavioral changes, not simply structural changes, are their goal anyway. Structural change is a congenial focus for the Federal government because structures can often be modified by affecting the legal or institutional parts of the system. The government already possesses the expertise and techniques (regulations, reporting requirements, directed grant programs, etc.) to do that. But the Federal government, no less than any other actor, can only do what it can defend. Local control of local schools is still a powerful amulet against Federal incursions. Because structural change is more widely accepted as legitimate, it does not deplete the government's small stock of authority. However, changing individual behavior directly is a lot more assertive, even aggressive, than changing the individual's organizational surroundings with the hope (and unspoken intention) of modifying the individual's behavior. Unfortunately, these "safer," more sanitary structural changes often fail to condition the behavior of people at the delivery level. (One part of the explanation has to do with the loose articulation of units in education or the loose coupling of the parts: pillows absorb huge shock.)

More recent attempts have moved deeper into the system. These efforts have a (roughly) social psychological focus. The label is not very satisfactory but it does recognize that organizations are made up of persons who have their own purposes. The newly classic technique under this rubric is organization development, which despite the first word in its title is aimed

at changing individual behavior and changing it a lot more immediately than the previously discussed structural mode. Federal efforts designed to encourage, e.g., team building, needs assessment, process consultation, and internal R, D & D capabilities fall under this heading. Of the scores of tenets which describe these techniques, only two need to be noted here.

The first of the OD assumptions is that the person who is to change must recognize the need for that change prior to adopting the new behavior. When the individual to be changed disagrees about the need for a new, improved behavior, the OD approach frequently changes the contingencies of the situation by, for example, making it less threatening, by reducing the amount of changed behavior that is expected, or by reinforcing existing behavior. But, from the perspective of Federal policy, there are severe problems with "felt need" tenet. First, most school people are at the very least quasi-professionals, they believe in what they are doing. Their current teaching or administrative repertoire represents their best judgment about how to do the murky business of education. Because their current practice is the summary of what they believe desirable and feasible, they are not likely to admit the need to change. Acknowledging a need to change is a negative evaluation of their own performance. Although it is a kind of indictment of self, the social psychological techniques of change-agentry have no counterpart to the citizen's constitutional privilege against self-incrimination. Second, modifying the change in order to make it more palatable to the person who is to be changed can easily dilute it beyond any Federal utility.

The other OD tenet to be considered deals with self-interest. Most psychological approaches stress the individual's self-interest as the sine

qua non of behavioral change. Unless the individual's perceived self-interest can be engaged, there will be no change. (How can it be to an individual's self-interest to admit personal or professional inadequacies?) But, what happens when self-interest remains persistently at odds with the desired innovation? Federal policy cannot be interested in those schools that are marvelously sensitive to client demands, that eagerly search for better ways to teach and learn, that are constantly engaged in self-renewal. Such schools and school systems cannot and should not be the target of Federal assistance.³ The critical test for Federal innovation policy is the group that is not interested in change. It is easy to run programs about which there is consensus; it is easy to run programs which do not intend to do anything except to help people do more of what they are already doing. One recalls Saint Exupery's Little King who was always careful to require only those things that the Little Prince would have done anyway. Chester Barnard wrote about the conditions which facilitate the use of authority: 1) the object of authority understands its communication; 2) believes that compliance is good for the organization; 3) believes that compliance is personally beneficial; and 4) is actually able to comply. But since Barnard's conditions are remarkable by their absence, the question is how can Federal policy be conceived so that those people who don't understand, and who don't believe that an innovation is good for them will nonetheless respond in directions consonant with Federal purposes. How

³The first year's operation of ESEA Title I included an incentive feature that gave a bonus to those districts that substantially increased local tax levy expenditures for Title I eligible kids. It quickly became apparent--especially to Congressional critics--that only the country's wealthiest school districts had the discretionary resources to increase their own expenditures and thus qualify for the Federal bonus. This unintended rich-get-richer feature was quickly eliminated.

can people be brought to do that which they would not otherwise do?

This part of the paradox of a user-driven system that does not satisfy Federal purposes could be handled by simply giving up. The retreat from Federal purposes that characterizes periods of American government (and some government officials) is motivated in part by the difficulties posed by the paradox. Schools are not, after all, immune from benign neglect. But there may be a more acceptable way out than simply copping out. One of the few insights which political science has succeeded in elevating to the status of a law declares that the only reliable motive is self-interest. Government works best when it can arrange particular self-interests so that they aggregate to the public good. [Both social psychology and political science use self-interest as a fulcrum for change. The difference is that the political scientist does not expect (and generally does not want) to change the definitions of self-interest that people carry with them. Rather, the political scientist seeks to arrange things so that self-defined self-interest will nonetheless conduce to public interests.]

But, how can Federal officials in education arrange the self-interests of their partners in the schooling system? How can those people who are to adopt a change--even though they do not want to--come to understand, believe and accept that they should do so? Several methods are available and are represented to a greater or lesser degree in tactics employed by various programs.

Forcing Change. On rare occasions, there are problems of such compelling importance that their symptoms are proscribed. School attendance, for example, is compelled by the State. Some forms of racial discrimination, in some school settings, can be legally enjoined. Some practices which have

formerly been thought to be useful parts of pedagogy are prohibited outright--corporal punishment for example. The generally aversive sanctions attached to the proscribed behavior must be sufficiently distasteful that the individual acquires a new self-interest in avoiding them. Political scientists define power as requiring someone to do that which he/she would not otherwise do. Although part of this strategy involves denying legitimacy to the old pattern of behavior, under this pure power strategy, what someone thinks is less important than what someone does. They may persist in disagreement as long as their actions conform to a newly imposed value.

Buying Change. This is a more common tactic through which the Federal government deals with the problem of legitimate disagreement. Agreement can be purchased. It is possible to make the size of an incentive so large that it will swamp (some, but only some) opposition. The reward offered for compliance need not be very large in aggregate Federal terms as long as it elicits the intended local response. That is especially the case where LEA's are overwhelmed with problems and hard pressed for soft money. In that quite common situation school people will respond to practically any program which is pointed at an existing need or which can be bent from its original purposes to serve locally determined purposes. This strategy works by eclipsing the individual's prior self-interest. Because of the size of the new reward, the old self-interest pales. Thus the target of change need not alter his/her orientation to the previous self-interest as long as the superiority of the new one is acknowledged. Buying change has been pilloried as a tactic of "throwing money at social problems" which some people would have us believe does not work. Of course, throwing

money at the problem of say, getting a handful of American astronauts back and forth to the moon worked splendidly. With sufficient patience and cash the technological or organizational dimensions of social problems can at the very least be ameliorated. The fact that patience and cash are both functions of political will is related to the questions of politics raised by the problem of change. Still, the principle established is that change can be purchased and that more changes could be purchased with more money. School reformers may not like the size of the increment and the public may not like the cost, but the strategy is sound.

Persuading Change. This is the heart of the rationalist approach. The notion is that the user/implementor will be so dazzled by the penetrating logic, by the superior performance, by the greater ability of the innovation that the new thing will replace the old thing as the object of the individual's affections. The (unalloyed) promulgation of improved curricula, the lighthouse dissemination of better teaching methods are examples of this strategy. The maintenance of an ERIC system which makes information about better practice available on user demand is another example. In the persuasion mode the user comes to believe that his/her previously understood self-interest was incorrect--or at least that it was inferior to the benefits associated with the new "persuaded" version.

Manipulation Change. Despite the old saw, "I teach but you manipulate," this is a category with great salience to government policy. Few proponents of change operate so purely from a basis of reason that they can resist the temptation to "enlighten" another's self-interest. Manipulation is a process of one person supplanting another's self-interest until it co-

incides with the first person's interest--regardless of whether it is "truly" or "actually" to the benefit of the person being manipulated to have acquired a new "self-interest." Obviously, determining the difference between "manipulation" and "persuasion" involves determining "true" self-interests. Manipulation need not go on only through a process of bamboozlement. It can proceed by encouraging someone to identify with a leader, to emulate another, to "fall in line," and so on. The danger in manipulation is in its abuse. Once the manipulator has determined what someone else's "real" self-interest is, then the manipulator quickly comes to feel (often quite passionately) that any or all actions are legitimated by that superior interest. History is full of sad consequences which is why most political scientists believe that the individual right of self-determination should be virtually inviolable.

Reinforcing Change. A fifth strategy counts on the fact that with or without outside assistance, at any given moment, some districts, some schools, some individuals will be doing something new or different. The initial impetus for that autochthonous (sprung-from-the-ground) change comes from the user. The reinforcement for continuing, intensifying, or extending the change comes from the Federal government. Some ESEA projects have, for example, supported the continuation of LEA efforts that had been previously, locally initiated. The Public Works Employment Program gave extra points in its proposal competition to those projects which had been begun with local resources and were only to be completed with Federal money. But the requirements in most education programs that Federal dollars not be used to supplant local dollars attempt to preclude the sort of rein-

forcement discussed here, at least in part to avoid helping the rich get richer and to concentrate assistance on those with the most need. Thus, reinforcing existing change may be antithetical to one basic mission of the Federal government.

It should be clear from the foregoing that the success of three of the five strategies rests on altering the individual's definition of self-interest (buying change, persuading change, manipulating change). The strategy of forcing change is indifferent to attitudes and concentrates only on behavior. The fifth strategy, reinforcement, rests on prior voluntary changes in the definition of self-interest.

The five strategies are not equally available for Federal programs, in large part because they vary in the amounts of legitimacy necessary to sanction their use. The forcing technique can only be used where there is substantial social agreement on the goals to be achieved. The attempt to prohibit the society's abuse of alcohol is an historic example of the consequences of power which exceeded its legitimacy. The effort to prohibit the use of marijuana is a more contemporary example with similar results. An intermediate case, Federal attempts to prohibit some kinds of racial and gender role identity discrimination may be used to point out the ways in which some prohibitions which initially over-reach the public's consensus can be used to educate or to lead the public.

If the legitimacy accorded each strategy is one variable that helps determine the political feasibility of these strategies, the second variable has to do with attitudes versus behavior as a target for change. The attractive thing about changing attitudes is that frequently the re-

sulting behaviors are then voluntarily and cheaply modified.

When people are subdued by force
they do not submit in heart.
They submit because their strength
is not adequate to resist.
But when they are subdued by virtue,
they are pleased in their inner hearts,
and they submit sincerely.

(Mencius, Chinese philosopher c. 300 B.C.)

Attitude change may be more efficient and more effective, but it is also more difficult to achieve and in some ways demands more legitimation. If, for example, all we aspire to, is to get teachers to stop hitting children, then that may be achieved by a relatively simple legal injunction or by making the act of hitting a pupil a punishable offense. The infringement of the teacher's person is much less than that which follows from an attempt to change the teacher's behavior by changing the teacher's attitude to a more loving, accepting, humane posture toward children. The latter has comprehensive, thorough-going consequences for the teacher as a person. As an intervention it is much more difficult to legitimate than "simply" proscribing a very particular behavior. (See Attachment A for a display of some of these factors as they relate to different types of government programs.)

Design Specifications

On her death bed, Gertrude Stein was supposed to have been asked by her students, "Tell us the answer." She replied, "Tell me the question" and died. The first part of this paper poses a paradox about the Federal role in educational improvement. Briefly, the paradox of a user-driven system is that although local autonomy should be maximized at the delivery

level and although that autonomy may lead to greater achievements in some units, those units (districts, schools, or individuals) will not be those most in need of change. A system that only helps the good to get better falls far short of the net improvements which legitimate the Federal effort.

If that is the problem, what is the answer? Although the Stein approach certainly has prudence to recommend it, the task in this part of the discussion is to suggest a number of features which would characterize a user-driven system and to relate those features to the paradox. Political science deals with the distribution of values, especially with the clash of legitimately differing values. Because of that, the field is littered with dilemmas which are only partially reconcilable. The features of user-driven system described below do not solve the basic paradox. They are offered in a spirit of successive approximation. Two rules have been used in selecting these features. (1) What will maximize the prospects for successful change at the service delivery level (schools and classrooms)? (2) What can reasonably be assumed to be within reach of Federal policy makers and program administrators? The features are a sort of factor list. To the extent that each factor can be reflected in policies, regulations, and procedures, the prospects for successful improvement at the service delivery level should be enhanced. (Most of the features are described as they would apply to an individual.)

(1) Self-Interest. Self-interest is the only reliable motivation: the task of government is to arrange multiple self-interests so that they aggregate to a larger interest, or more likely, interests. Thus a user-driven

system must capitalize on those moments when its users' self-interests are most clearly engaged.

(A) Survival Self-Interest: Samuel Johnson once observed of the prospect of being hanged that it seemed to have a marvelous power to concentrate a person's mind. In a similar fashion, school district responsiveness is supposed to be a function of exogenous shock. From the schooling point of view, the cumulative effect of the taxpayer's revolt, declining enrollments, and State constitutional reforms of educational finance has resulted in greater restructuring of the educational services than any event since the Baby Boom. But that restructuring has been wholly unconsciousness and unsystematized. It is possible that the instinct for survival which accompanies such crises may open districts to assistance, ideas, initiatives from a variety of sources. A user-driven system would use such attention-concentrating crises as cues. The crisis need not be externally generated: internal bureaucratic crises can also be employed--including for example, those associated with regime changes.

It can also be argued that crises paralyze educational organizations. The vast majority of New York City's 900 or so building principals have done only what was necessary to cope with the dramatic retrenchments forced on them. But a very small group used the fiscal situation as an opportunity to re-organize, redirect, and re-negotiate basic aspects of their schools. Most administrators were paralyzed by the fiscal crisis: a few found in the same event the necessary mandate to action. What accounts for the difference? While the answers to that should be pursued at the level of the individual, at both the individual and the organizational level there is probably such

a thing as an optimum amount of crisis. Thus one of the topics that needs attention is what Don Michael has called the "ethical management of crises." To what extent may Federal policy be used to provoke crises in order to simulate attention to change?

(B) Ambition Self-Interest. Leader responsiveness to a clientele has repeatedly been demonstrated to be a function of ambition. For example, a school board member who wants to use her accomplishments with the schools as a platform to run for the city council, and that as a platform to run for the state legislature, and that as a platform to run for the Congress has a greater personal incentive to be responsive to each constituency than the allegedly "selfless" individual who lacks ambition and who can thus be indifferent to constituency. In addition, public participation in decisions which determine the careers of elites (hiring, firing, promoting, transferring, etc.) has also been found to be related to responsiveness. The ambition of the individual is an aperture which Federal policy might exploit by managing the career-enhancing aspects of Federal programs (e.g., status, visibility, mobility, identification with user-driven projects, etc.).

(C) Self-Realization Self-Interest. As professionals and as human beings, school people want to make a personal contribution to children and to society. They strive to do a better job, to make use of their talents, to realize their potential. This need for self-realization can be harnessed through the same sort of program design features described elsewhere in this section. [It may be helpful to note that this type of self-interest comes last, not first on this list. Many change agent efforts have assumed that

professionals would rush to embrace that which makes them better professionals. While there has been motion in that direction, it has not been a stampede. And again, the wrong people (in one sense) have moved the farthest.]

(2) Natural Entry Points. A precept in organization change is that naturally occurring apertures for influence should be exploited.

(A) Early Professional Imprinting. Baby ducks relate to any source of early nurturing whether or not it is a duck. If they learn at all, birds learn to fly in the first few feet between the edge of the nest and whatever they would otherwise have landed on. Learning to teach is not quite so draconian but the first days in a classroom do have an imprint on the beginning teacher. The first post as a principal or a superintendent shapes the rest of an administrator's career so powerfully that there is evidence to indicate that many administrators simply repeat whatever they did in their first job as they move through a series of positions. The apprehension and uncertainty of such moments, combined with the need to perform, create a marvelous opportunity for assistance. The benefits reaped from this tactic have the same sort of premium as the more general pedagogical stress on early childhood education.

(B) Slack Resources. Innovation is also related to the amount of slack resources. Contrary to popular expectations, an organization in which employees do cross-word puzzles, take long lunch hours, and go home early is also an institution that has under-utilized resources which can be available for new departures. Vestigial offices and redundant staffs are signals of slack resources. Unfortunately slack resources are more likely

to be characteristic of rich schools than poor schools, although that is not always true. Most city schools are an exception. The point is that Federal policies designed to facilitate user-driven change should try to exploit slack resources, either by discerning their presence or by providing them.

(C) Second Circle Emulation. Peer teaching is a well-known ingredient of effective change. The emulation of other people "in the trenches," "on the firing line" is a credible source of assistance and should be maximized in a user-driven system. But an important caveat needs to be added to this general principle. One's immediate peers are not useful in this capacity. Dissemination and diffusion appear to skip over the adjacent concentric ring of peers and to be effective with a group of like individuals at least once removed. The probable explanation is that first circle peer emulation is too threatening (someone doing a better job while working in the same environment with the same resources is probably a show-off if not a cheat). It is preferable from the user's point of view to learn from a peer far enough from home so that (a) asking for help can't be interpreted as a self-indictment; so that (b) invidious competition and comparison is reduced; so that (c) the ideas can be changed with impunity; and so that (d) they can be credited to their new user. The general emphasis on linkage networks, especially on a regional or state basis is consonant with the features.

(D) The Boundaries of Practice. All professionals conduct themselves within a framework of rules, regulations, guidelines, standard operating procedures and other constraints. While this route to change is a well-

worn path for Federal programs, it is always open for creative exploitation. An excellent example is the local CBTE project which arranged to have its teacher competencies written into the license renewal criteria of an LEA just as the project's Federal support was running out.

The informal dimensions of educational organizations also shape behavior, perhaps more powerfully than do the formal boundaries. The sense of camaraderie, of belonging, of turf, and so on are extremely important. In the past, Federal practice has attempted to deal with this by encapsulating change efforts in special purpose projects. But at the same time that those projects nurtured some of the efforts of the people inside them, they also carried the seeds of their own destruction by the larger culture. Still, if the price of the project's entry to the larger system is abandoning the chance of change, then the price is too high. This sort of dilemma needs careful attention, especially from sociologists and anthropologists.

(E) Professional Training. The last of the naturally occurring entry points for change is provided by the endemic requirements for advanced professional training required for official certification and/or promotion by a variety of jurisdictions. In theory, there should be a multiplier effect from having inculcated the faculties of graduate professional schools with new ideas which are then passed on to students who then become the leaders of institutions. The history of some graduate schools of education (Teachers College among them) demonstrates that and the intention of teachers unions and other professional associations to create their own in-service training programs reinforces the idea at the same time that it suggests an aperture for Federal support.

(3) Learning Theory Precepts. Several of the practices which characterize the best of individual teaching and learning are directly relevant to a user-driven system (especially when the individual user is the object of interest). Again, the features which follow should not be read as a counsel of perfection, but rather as a list of desiderata to be maximized where feasible. The challenge to policy management and administration is to determine, discover, and create ways to use these features.

(A) Clear Tasks. Situations which are most likely to elicit successful user responses are those that are stated operationally with components, requirements, and actions, sharply delineated. Unfortunately, innovation is by definition murky. The Scientific American advertises that "In a society that lives by innovation, discovery is our most important product." But discoveries are seldom clear even to those who make them. Still, there is a premium on clarity and the Federal partners in a user-driven system can help with the translation, operationalization, and communication. NIE's targeted communications program used this precept by requiring all contractors to analyze the information utilization style of the intended audience before preparing materials designed to be of assistance to that audience.

(B) Early, Frequent Success. The next three specifications deal with a critical area--the process and structure of rewards for change. In general the task is to design incentives that reinforce behavior which both the users and the Feds regard as desirable. Rewards must be significant (in relation to the effort), and they must be contingent on do-able tasks where achievement is a realistic expectation. Current Federal program management

procedures encourage users to propose millennial goals, which although they cannot be met are still reinforced by continuation of project support. Thus current management practices teach users to be cynical about goals, indifferent to any achievement level, and disdainful of Federal project supervision.

The importance of reinforcement as a management device is paramount. Tasks in a user-driven system should be divided and sequenced in such a way that their accomplishment can be the occasion of lots of early rewards. Some aspects of Federal program management (progress reporting, proposal review, needs assessment procedures) might lend themselves to this feature but would need to be substantially modified. Unfortunately, it is the nature of innovation that clear, do-able tasks are rare. Where they have existed, they have probably already been done. Still, this is a valid design principle for a user-driven system.

(C) Non-aversive Feedback. The discussion so far implies the need for a feedback system from the Federal to the user level which would be non-aversive and realistic. Where the users believe that the life or death of their projects is determined by an evaluation, they will bias or distort the evaluation. While it is understandable and even praiseworthy that innovative efforts should seek to perpetuate themselves, that quest obfuscates Federal judgments about which programs should be perpetuated and which not. The introduction of so-called "third party evaluators" has not remedied the situation. A second aspect of feedback involves providing project management with performance assessment data sufficient to inform their decisions,

not about project continuation, but about project modification. The introduction of "documentation and analysis" activities is a step in this direction. Neither local level project managers or Federal program officers can trust "evaluation" data to learn about what needs to be done. Thus, in recent years, NIE has begun to fund "documentation and analysis" efforts that are separate from evaluation.* The results of documentation and analysis efforts, can be reported to separate entities within the sponsoring agency and treated as relatively privileged information.

Separating information about short-term project functioning from evaluation information used to determine a project's continuation raises an interesting problem. Suppose that a project gets somewhat offtrack and reports that event to a Federal program officer who then struggles dutifully to modify the project in the direction of greater success. Suppose further that the project continues to fail and that its lack of performance eventually becomes manifest through the separate evaluation process. The scenario might then well include one Federal employee (the one in possession of the evaluation data and responsible for the project go/no go decision) charging another Federal employee (the one with the more realistic doc-

*A feature which is somewhat contrary in spirit to the user-driven system would be the use of an aversive threshold. Some user excursions may be so far afield, so inefficient, or so counter-productive as to require sanctions beyond initial feedback and subsequent withdrawal of support. A number of precedents exist. New York City regularly publishes a list of its most wanted parking ticket scofflaws. The institutional censure list of the American Association of University Professors is an even more assertive negative sanction. Obviously, this part of the user-driven system is optional-at-(great)-extra-cost.

umentation data and responsible for the near-term project modification) with having withheld evidence about a failing program which might have been used to make a more timely and fiscally responsible decision about termination. The scenario is a realistic one and points up a critical dilemma...Can the Federal government afford to trust the delivery level to make mistakes and, if it can't, how much progress can be expected?

(D) Selective Reinforcement. A central part of the user-driven strategy is the reinforcement of only those user behaviors which appear on the Federal agenda. (Obviously, this assumes Federal agenda.) In operant conditioning, non-reinforced behavior withers away but that is an unlikely public prospect given multi-pocket budgeting and the 8-10% Federal share of a largely locally funded activity. Federal support should continue to be available only for activities that are consonant with Federal purposes. The difference here is no great departure from current practice except in the extent of the subsequent user self-determination of means once the goals are agreed upon. A somewhat greater departure is a more thorough articulation of the Federal agenda. Unified and transitively ranked mission statements are not characteristic of large bureaucracies and may even be undesirable to the extent that they focus opposition. However, the government has managed to declare several fairly stable priority areas in recent years (e.g., Title I evaluation research, career ed, Teacher Corps). Such declarations can be used as a basis for selective reinforcement.

(E) Sense of Fate Control. Educational achievement is linked to what the student believes about him or herself. Where the student believes that

success is determined by others (sometimes called an external locus of control), then the child will not try, will fail, and will be confirmed in the self-assessment of inefficacy. The internal/external locus of control has a precise analogy in the subordinate/superordinate hostility and sullen withdrawal that currently afflicts some UN/SEA/Federal efforts; the notion of a user-driven system is clearly designed to maximize the beneficial aspects of an internal locus of control.

(6) A User Monitoring System. One emphasis throughout the user-driver system is on being responsive to locally initiated efforts or at the least to situations such as crises or external shocks which are likely to be followed by user receptivity to change. But how, with 90,000 school buildings and 2 million teachers, can the Federal government become aware of such critical moments? The prospect of a Federal intelligence network that would be comprehensive enough and sensitive enough to register such events raises a Big Brother spectre. Fortunately, some events leave traces that can easily be registered (strikes, failed bond issues, resignations, promotions, etc.). For the rest, the monitoring system might have to rely on user self-reporting. The point is, however, that in order for the government to act to reinforce or shape change, it must first be aware of the precipitating events and that is the purpose of the monitoring system.

(7) "Over-Designing." The arm wrestle that goes on between nominally adopting sites and those innovations that are supposed to change them is well known. The sites are played by King Kong in that struggle and their power to modify project features is well documented. Given current technology, this phenomenon of partisan mutual adaptation appears to be unavoid-

able. But a more complete understanding of partisan mutual adaptation would allow us to predict the direction in which projects would change given certain data about site and process features. That information might then be used, in effect, to "over-design" project features so that their eventual reality would be closer to original intentions than what we now can achieve. The procedure is similar to that of a bridge architect who allows for materials to stress and sag in order that the bridge may slump into place.

It has also been suggested that (a) deviation is the price that the site charges the project for admission and that (b) deviation represents a functional adjustment of the project's features to the site's reality. This, as well as the stress of local autonomy suggests that Federal sponsors need to accord users much more flexibility than previously.

(8) The Reality of Disjointed Incrementalism. Few things have had a more pernicious effect on Federal innovation policy than the projection of a hyper-rationalized model of "decision-making" or "problem-solving" onto others. People contemplating problems do not solve them by adopting wholesale changes, they avoid them wherever possible. The actions they will take will be only enough to escape the worse consequences, not enough to expunge the source of the difficulty. Race is probably the best example. In a "problem-solving" mode, one might expect school officials to recognize the problems of racism, to search for alternative solutions, to compare them and then to select and install that solution with the optimum ratio of benefits to costs. But public action about racism in schooling is neither voluntary nor rational. Only a handful of dis-

tricts have spontaneously desegregated (White Plains in New York and Berkeley, California, come to mind). The other 21,998 have waited for court orders, boycotts, or other dramatic problems and then have reacted only enough to ameliorate the most egregious and compelling symptoms. "Problem-solving" is a grossly inaccurate characterization of these events.

The point is not to abandon our aspirations ("problem-solving") but rather to premise our actions on realistic diagnoses of the behavior of people and institutions (problem-avoiding). There is no level of this system at which decisions and actions meet tests of academic rationality. If Federal policy is to be premised on reality, it should instead assume a picture of decision-making which is much closer to what Lindblom calls "disjointed incrementalism." The following specifications are derived from that body of theory.

(A) Let a Thousand Wheels Be Re-Invented. It now seems clear that there are far fewer determinate answers to generic questions in school improvement than had been hoped. The nearly idiosyncratic power of place (recall the 90,000 public school buildings) has been seriously underestimated. Each site seems compelled—some would say doomed—to a drudging rediscovery of the inadequacy of sleds and rollers and then to a discovery of the usefulness of an axle stuck through a disc. While that may seem horribly inefficient, it should be compared to the situation in which heaps of wheels lie around unused because of the local conviction that "they won't work here." The chief adjustment has to do with shifting Federal expectations to net change rather than isolated though spectacular break-

throughs. The thousand-wheels feature also argues for more patience in program monitoring. The fact that such a policy will seem depressingly atomistic from the national perspective is exactly why the basis for this part of the design specifications of the user-driver is called "disjointed" incrementalism.

(B) Marginal Change. Schools, no less than any other social institution are the product of many, many agreements and compromises, painfully ground out over long periods of time. Moreover, schools are quite successful at many of the tasks handed them (especially considering the resources allowed them). Because of the long-standing socio-political reality thus represented, wholesale change or radical transformation is simply not a viable expectation (except in exceedingly rare revolutionary moments). Changes are therefore incremental, they are calculated from the existing, unchanged base, and they are calibrated in millimeters, not kilometers. Federal policy should recognize that by taking into account the state of the local art when deciding whether or not a proposed user departure meets a test of significance. Admittedly, it will be difficult to gain political support for the modest gains implied by an incremental strategy. Surprisingly enough, even Congressional audiences of policy elites sometimes need educating about political feasibility. A more accurate appraisal of what is possible should help to avoid the boom-and-bust cycle of support that now follows the over-selling and the over-reacting between proponents and critics.

(C) Limited Calculation. People use that information which is most convenient--chronologically, geographically, psychically, politically, and economically. They do not make exhaustive searches of a hypothesized universe of alternatives. They do not attempt to determine maximized expected utility on all possible alternatives. A user-driven system would capitalize on these unavoidable limitations by providing technical assistance at the critical junctures described elsewhere in this paper.

(D) Goals to Means Adjustments. Users can be counted on to behave as everyone behaves. That is, before they decide what sorts of things they want to achieve, they will make a quick inventory of what is available to be used for what purposes. Thus, stated goals will be tailored to available means and not, as in the rational calculus or as in classic economics, the other way around. Since federal means are undoubtedly part of what the users will employ to calculate their goals, the Federal government can assist by either making sufficient resources available to support the user's achievement of jointly shared goals or by candidly stating limits on what it believes feasible given available resources.

(E) A Remedial Orientation. This feature also deals with expectations. Despite rhetoric, very few programs aspire to do much more than make rotten situations somewhat better. While we can quibble over the size of "somewhat," it should be clear that for purposes of honest inter-level relationships in a user-driven system, accurate goal statements are preferable. Freud said, "Much is won if we succeed in transforming hysterical misery into common unhappiness."

Several of the features of disjointed incrementalism raise questions about how rational, teleological or goal-oriented people are. It is clear

that the hyper-rational paradigms of the recent past are not accurate descriptions of people's behavior, but that does not mean that people simply emit behavior or that they behave irrationally. The point is that they use a sort of rationality which is over-arching or architectonic; that rationality is much more subtle, it reflects more vectors, and it is necessarily more obscure than we have assumed. It is, in Raymond Bauer's terms, a sort of "rough and ready guidance rationality" which is not yet adequately captured either in the descriptive models of academics or in the prescriptive models of practitioners.

(F) Successive Approximation. Recent research has demonstrated that the half-life of some project features, as described in proposals and as measured from the project's initiation, can be expressed in nanoseconds. Given the facts of project decay (mainly due to partisan mutual adaptation), the design of a user-driven system will need to incorporate many cycles, many iterative stop-and-start attempts to reach a goal. The use of continuation funding on a short-cycle basis would contribute to that feature.

(G) Social Fragmentation. The attempt in the 1960's to build "one-stop shopping centers" in several areas of social welfare failed in part because it did not reckon with the range of participants and the range of interests (over the range of time necessary to improve a given area. The multiplicity of roles that contribute even to schooling (let alone education) is extraordinary. A user-driven system will need to accommodate and arrange those multiple inputs.

The proposition in this paper is a simple one. Change must incorporate more attention to the users. It is possible to design a system that achieves

more of that while not abandoning federal purposes. To the extent that the design specifications outlined here can be satisfied in federal program administration, then there will have been a reconciliation of the user-driven system with federal purposes.

Attachment: Programs and Their Characteristics

TYPE OF FEDERAL PROGRAM (from most to least assertive)	RELATED CHARACTERISTICS	(a) Supporting knowledge basis	(b) Amount of authority or legitimation required	(c) Need to require user response or implementation	(d) Object of Change
(1) Forced participation (no choice & no discretion)	a	most known: "causal" knowledge	most	most urgent	use
(2) Mandated adoption (not much choice)	b				use
(3) Minimum standards	c			somewhat urgent	use
(4) Purchased change (Federal Support)		assumed solutions		substantial	use
(5) Exemplary Demonstrations (Federal endorsement)			much		use att
(6) Dissemination (no endorsement; user choice)		less known; probabilistic knowledge		less	use att
(7) Targeted research		some knowledge	some	premature	not
(8) Planned variation		much less known		premature	not
(9) Naturally occurring experiments	d		very little	premature	not
(10) Evaluation & documentation		very little known		premature	not
(11) Athoretical basic research		nothing known	least		not
(12) Inaction					

Attachment: Programs and Their Characteristics

RELATED CHARACTERISTICS	(a) Supporting knowledge basis	(b) Amount of authority or legitimation required	(c) Need to require user response or implementation	(d) Object of Change
a n cretion)	most known: "causal" knowledge	most	most urgent	user behavior
				user behavior
			somewhat urgent	user behavior
	assumed solutions		substantial	user behavior
tions t)		much		user attitudes
er choice)	less known: probabilistic knowledge		less	user attitudes
	some knowledge	some	premature	not relevant
	much less known		premature	not relevant
d		very little	premature	not relevant
ntation	very little known		premature	not relevant
research	nothing known	least		not relevant

29

achment appear on the following page.

Notes to Figure I: Programs and
Their Characteristics

- a. Federal mandates are quite rare because they are hard to legitimate. The states compel school attendance and Federal courts support that. If there had been more widespread compliance with the Supreme Court's injunction against prayer in the schools, that might qualify as an instance of forcing. It is interesting to note that the judicial and not the executive branch is the source of these most prescriptive actions.
- b. The Brown decision is the best example of a de jure mandate with widely varying de facto responses.
- c. For example, the Federal education establishment may regulate maximum class size, minimum illumination of a room, the presence of advisory boards with prescribed representation, etc., as a pre-condition for eligibility for Federal funds.
- d. At any given time, there is a substantial amount of intended and unintended variation underway in schools and systems. This strategy makes use of that variation to locate ranges of behavior and outcomes on pre-determined variables.